

**Abstract:**

The invention describes methods for inhibiting angiogenesis in a tissue by administering an antagonist that specifically binds to a proteolyzed or denatured collagen type-IV with substantially greater affinity than to the native triple helical form of collagen type-IV. Methods utilizing such antagonists for therapeutic treatment of tumor growth, tumor metastasis or of restenosis also are described, as are methods to use such antagonists as diagnostic markers of angiogenesis in normal or diseased tissues both *in vivo* and *ex vivo*.